

Appl. No. : 09/331,631
Filed : June 21, 1999

- 4B9
- a) obtaining from a known sequence or designing, using a computer modeling program, an amino acid sequence which forms a helix-turn-helix structure;
 - b) replacing individual residues to achieve **[substantially]** the same distribution of positively charged residues and cysteine residues in said amino acid sequence; and
 - c) synthesizing or expressing a protein comprising said amino acid sequence chemically or by recombinant DNA techniques in liquid culture.

10 18. (Amended) The protein fragment of Claim 1, wherein said **[protein fragment is a polypeptide containing a]** relative cysteine spacing **[of]** comprises C-2X-C-3X-C-(10-12)X-C-3X-C-2X-C (SEQ ID NOS:31-33) wherein X is any amino acid residue, and C is cysteine.

19. (Amended) The protein fragment of Claim 1, wherein said protein fragment is selected from the group consisting of:

- residues 29 to 73 of SEQ ID NO:1;
- residues 74 to 116 of SEQ ID NO:1;
- residues 117 to 185 of SEQ ID NO:1;
- residues 186 to 248 of SEQ ID NO:1;
- residues 29 to 73 of SEQ ID NO:3;
- residues 74 to 116 of SEQ ID NO:3;
- residues 117 to 185 of SEQ ID NO:3;
- residues 186 to 248 of SEQ ID NO:3;
- residues 33 to 75 of SEQ ID NO:5;
- residues 76 to 144 of SEQ ID NO:5;
- residues 145 to 210 of SEQ ID NO:5;
- residues 34 to 80 of SEQ ID NO:7;
- residues 81 to 140 of SEQ ID NO:7;
- residues 33 to 79 of SEQ ID NO:8;
- residues 80 to 119 of SEQ ID NO:8;
- residues 120 to 161 of SEQ ID NO:8;
- residues 32 to 91 of SEQ ID NO:21;
- residues 25 to 84 of SEQ ID NO:22;
- residues 29 to 94 of **[SEQ ID NO:23]** SEQ ID NO:24; and
- residues 31 to 85 of **[SEQ ID NO:24]** SEQ ID NO:25; and

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4310 residues 1 to 23 of SEQ ID NO:25]

IN THE SEQUENCE LISTING

~~Please cancel from the specification the original sequence listing pages 34-66 and substitute therefor the replacement sequence listing pages 1-25. Please renumber the following pages as needed.~~

IN THE ABSTRACT

~~Please add the enclosed abstract page 67.~~

REMARKS

In response to the verbal restriction requirement of April 27, 2000, Applicants elect Group I, Claims 1-3, 11, 13, 16-23, 30, 34, and 41. Claims 4-10, 24-29, 35, and 38 are canceled as drawn to a non-elected invention. Claims 12, 14-15, 31-33, 36-37, and 39-40 remain pending and upon allowance of the Group I claims, Applicants respectfully request rejoinder. The sequence listing has been amended to correct minor informalities. Enclosed herewith are: (1) a paper copy of the Replacement Sequence Listing, (2) and a computer readable version of the Replacement Sequence Listing. This document directs entry of the paper copy of the Sequence Listing into the application. In view of the foregoing, the application is believed to fully comply with the Sequence Listing Disclosure requirements.

In response to the Office Action, the Specification was amended to correct minor informalities in spelling and British word usage. Claims 1, 2, 11, 12, 16, and 18-19 were amended to more clearly recite the claimed invention. As a result of the above amendment, Claims 1-3, 11-23, 30-34, and 39-41 are presented for further examination. No new matter has been added herewith.

Response to Restriction Requirement

Applicants would like to affirm the election of Group I, Claims 1-3, 11, 13, 16-23, 30, 34, and 41, drawn to an isolated protein, without traverse. However, upon allowance the Group I claims and specifically, Claim 1, Applicants request rejoinder of the Group III method claims (Claims 12, 14-15, 31-33, 36-37, and 39-40) because they are dependent on an elected claim.

Rejection under 35 U.S.C. §112, second paragraph